

2026

(Regular)

Geography (Core)

Paper Code : GG-CE-4234

Paper Name : Introduction to Cartography and Surveying techniques

Time : 2 hours

Full Marks : 45

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer :

1×4=4

a) Which of the following is a small-scale map ?

i) A cadastral map

ii) A city street map

iii) A world map

iv) A building plan

b) Which of the following is the principle of surveying ?

i) Whole to whole

ii) Part to part

iii) Part to whole

iv) Whole to part

c) When the source of light is placed at the centre of the globe, the resultant projection is called

i) Orthographic

ii) Stereographic

iii) Gnomonic

iv) All the above

d) In which of the following type of surveying only linear measurements are made ?

i) Dumpy level

ii) Theodolite surveying

iii) Chain surveying

iv) Contouring

2. Answer the following questions :

2×3=6

a) What is a base map ?

Contd...

- b) State any two functions of prismatic compass.
- c) Distinguish between plane and geodetic surveying.
3. Answer **any three** of the following questions : $5 \times 3 = 15$
- a) Explain briefly the principle of levelling with the help of dumpy level.
- b) Discuss the types and significance of surveying in geographical studies.
- c) Differentiate between traditional and modern cartography.
- d) Discuss the main properties of conical projection with one standard parallel and describe its major limitations.
- e) Discuss the scope of cartography in the contemporary period.
- f) Explain the procedure of conducting plane table survey.
4. Answer **any two** of the following questions : $10 \times 2 = 20$
- a) What is a map ? Mention its salient characteristics and scheme of classification. $2 + 8 = 10$
- b) What is a thematic map ? Describe its different types with examples and also highlight its limitations. $2 + 6 + 2 = 10$
- c) Give a brief classification of perspective Zenithal map projection and discuss the properties of each type. $5 + 5 = 10$
- d) Explain the working principle of a theodolite. Discuss its advantages in surveying. $6 + 2 + 2 = 10$

